UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,849	03/23/2001	Nobuyuki Tanaka	14447	5767

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EXAMINER
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ART UNIT	PAPER NUMBER
2137	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/815,849	TANAKA, NOBUYUKI
	Examiner	Art Unit	
	Michael Pyzocha	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 January 2005_.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-6_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-6_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-6 are pending.

2.   Amendment filed 01/12/2005 has been received and considered.

Specification

3.   Examiner acknowledges clerical error in the previous Office action, which objected to claims 64-81 and 141-158, which should have only included pending claims 1-6.

4.   After further examination of the specification this objection is withdrawn because of Applicant's argument that the structure corresponding to the means-plus-function limitations is clearly stated in the specification.

Claim Objections

5.   The objections to claims 2 and 3-4 are withdrawn based on the amendment filed on 01/12/2005.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published
under section 122(b), by another filed in the United States before the
invention by the applicant for patent or (2) a patent granted on an
application for patent by another filed in the United States before the
invention by the applicant for patent, except that an international
application filed under the treaty defined in section 351(a) shall have the
effects for purposes of this subsection of an application filed in the
United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English
language.

7.   Claims 1-6 are rejected under 35 U.S.C. 102(e) as being

anticipated by Donescu et al (U.S. 6,674,873).

As per claim 1, Donescu et al discloses frequency region

converting means supplied with an original image of one frame

divided into a plurality of blocks each consisting of a

plurality of pixels, for converting said original image into a

frequency-converted image data of a frequency region block by

block (see column 6 lines 45-53); electronic watermark data

memorizing means for preliminarily memorizing a plurality of

electronic watermark data; insertion information memorizing

means for memorizing insertion information for designating the

electronic watermark data to be inserted corresponding to the

respective blocks among said electronic watermark data stored in

said electronic watermark data memorizing means; electronic

watermark data selecting means for selecting said particular

electronic watermark data designated by said insertion

information block by block from said electronic watermark

memorizing means to produce a selected electronic watermark

data; and insertion apparatus electronic watermark data

inserting means for inserting said selected electronic watermark

data in said frequency- converted image data of the frequency

region to produce an electronic watermark inserted composite

image data (see column 7 lines 21-30 where it is inherent that

to insert a watermark there must be memory to store the

watermark data, information stored on what part of the watermark

data to insert, and means for selecting where to insert the

watermark data).

As per claim 2, Donescu et al discloses frequency region

converting means supplied with an original image of one frame

divided into a plurality of blocks each consisting of a

plurality of pixels, for converting said original image into a

frequency-converted image data of a frequency region block by

block (see column 6 lines 45-53); quantizing means for

quantizing said frequency-converted image data into a quantized

image data (see column 6 lines 54-58); electronic watermark data

memorizing means for preliminarily memorizing a plurality of

electronic watermark data; insertion information memorizing

means for memorizing insertion information for designating the

electronic watermark data to be inserted corresponding to the

respective blocks among said electronic watermark data stored in

said electronic watermark data memorizing means; electronic

watermark data selecting means for selecting said particular

electronic watermark data designated by said insertion

information block by block from said electronic watermark

memorizing means to produce a selected electronic watermark

data; and insertion apparatus electronic watermark data

inserting means for inserting said selected electronic watermark

data in said frequency- converted image data of the frequency

region to produce an electronic watermark inserted composite

image data (see column 7 lines 21-30 where it is inherent that

to insert a watermark there must be memory to store the

watermark data, information stored on what part of the watermark

data to insert, and means for selecting where to insert the

watermark data); and Huffman coding means for carrying out a

Huffman coding on said electronic watermark inserted composite

image data (see column 6 lines 59-64).

As per claim 3, Donescu et al discloses an electronic

watermark detection apparatus comprising: insertion information

memorizing means for preliminarily memorizing insertion

information for designating a type of electronic watermark data

to be inserted blocks by block in one frame divided into a

plurality of blocks; data extracting means, supplied with an

electronic watermark inserted composite image divided into a

plurality of blocks in which individual electronic watermark

data are inserted block by block, for extracting, on the basis

of said insertion information, the electronic watermark data by

adding the blocks in which the same electronic watermark data

are inserted to produce extracted data; electronic watermark

data memorizing means for preliminarily memorizing a plurality

of electronic watermark date inserted in the respective blocks;

electronic water data detecting means for calculating a

statistical similarity between said extracted data and the

respective electronic watermark data stored in said electronic

watermark data memorizing means; and determining means for

determining, on the basis of said statistical similarity,

whether or not said electronic watermark data is detected (see

column 13 lines 25-46 where it is inherent that the detection

device has means for memorizing the type of watermark data and

the watermark data).

As per claim 4, Donescu et al discloses an electronic

watermark detection apparatus comprising: insertion information

memorizing means for preliminarily memorizing insertion

information for designating a type of electronic watermark data

to be inserted block by block in one frame divided into a

plurality of blocks; data extracting means, supplied with an

electronic watermark inserted composite image divided into a

plurality of blocks in which individual electronic watermark

data are inserted bock by block, for extracting on the basis of
said insertion information the electronic watermark data in said
electronic watermark inserted composite image by adding the
blocks in which the same electronic watermark data are inserted
to produce extracted data; electronic watermark data memorizing
means for preliminarily memorizing a plurality of electronic
watermark date inserted in the respective blocks; electronic
water data detecting means for calculating a statistical
similarity between said extracted data and the respective
electronic watermark data stored in said electronic watermark
data memorizing means; electronic watermark data accumulating
means for accumulating said statistical similarity for a
predetermined time interval to produce an accumulated addition
value; and determining whether or not said determining means for
electronic watermark data is detected by comparing said
accumulated addition value with a predetermined threshold value
(see column 13 line 62 through column 14 line 9 and column 13
lines 25-46).

    As per claim 5, Donescu et al discloses an electronic
watermark detection apparatus comprising: insertion information
memorizing means for preliminarily memorizing insertion
information for designating a type of electronic watermark data
to be inserted block by block in one frame divided into a

plurality of blocks; decoding means supplied with a Huffman

coded composite image obtained by Huffman coding an electronic

watermark inserted composite image divided into a plurality of

blocks in which individual electronic watermark data are

inserted block by block decoding said Huffman coded composite

image block by block to produce a decoded composite image; data

extracting means for extracting, On the basis of said insertion

information, the electronic watermark data in said decoded

composite image by adding the blocks in which the same

electronic Watermark data are inserted to Produce extracted

data; data memorizing means for preliminarily memorizing a

plurality of electronic watermark date inserted in the

respective blocks; electronic water data detecting means for

calculating a statistical similarity between said extracted data

and the respective electronic watermark data stored in said

electronic watermark data memorizing means; and determining

means for determining, on the basis of said statistical

similarity, whether or not said electronic watermark data is

detected (see column 13 line 62 through column 14 line 9 and

column 13 lines 25-46).

As per claim 6, Donescu et al discloses an electronic

watermark detection apparatus electronic watermark comprising:

insertion information memorizing means for preliminarily

memorizing insertion information for designating a type of

electronic watermark data to be inserted block by block in one

frame divided into a plurality of blocks; supplied with a

Huffman coded composite image obtained by Huffman coding an

electronic watermark inserted composite image divided into a

plurality of blocks in which individual electronic watermark

data are inserted block by block, for decoding said Huffman

coded composite image block by block to produce a decoded

composite image; data extracting means for extracting on the

basis of said insertion information, the electronic Watermark

data in said decoded composite image by adding the blocks in

which the same electronic watermark data are inserted to produce

extracted data; memorizing means for preliminarily memorizing a

plurality of electronic watermark date inserted in the

respective blocks; electronic water data detecting means for

calculating a statistical similarity between said extracted data

and the respective electronic watermark data stored in said

electronic watermark data memorizing means; electronic watermark

data accumulating means for accumulating said statistical

similarity for a predetermined time interval to produce an

accumulated addition value) and determining means for

determining whether or not said is detected by comparing said

with a predetermined threshold electronic watermark data

accumulated addition value (see column 13 line 62 through column

14 line 9 and column 13 lines 25-46).

Response to Arguments

8.   Applicant's arguments filed 01/12/2005 have been fully

considered but they are not persuasive. Applicant argues: in

claims 1-2 the limitations the apparatus includes a plurality of

electronic watermark data that are selected by watermark

selecting means from memorizing means to be inserted at a

specific location, and in claims 3-6 insertion information

memorizing means, watermark data detecting means and determining

means.

Donescu teaches a plurality of watermark data as described

in column 5 lines 6-12 and column 10 lines 23-25 a secret

watermark data is associated with the creator or owner of the

image and one of these is selected in the cited portion of

column 10.

Donescu also teaches selecting means and memorizing means

in column 10 lines 6-12. The key has to be stored in some sort

of memory in order for it to be used and the key must be

selected (or read) from this memory in order for the apparatus

to function.

Donescu teaches the information for selecting where to
insert the watermark data as in column 7 lines 21-30. The
processing in a specific order in the information telling the
inserting means where to insert the watermark data.

As cited in column 13 line 62 through column 14 line 9,
Donescu teaches watermark data detecting means (in the cited
portion it is called watermark checking) and determining means
as shown in column 14 where the correlation is used with a
threshold to determine if the watermark is present. The
apparatus of Donescu must store what kind of watermark data is
inserted so it will be able to detect it using one of the
methods described using figures 15-17.

Conclusion

9.   The prior art made of record and not relied upon is
considered pertinent to applicant's disclosure. Rhoads et al (US
6229924), Cox et al (US 6154571), Florencio et al (US 6208745),
and Adler et al (US 6275599 B1) teach watermarking using
frequency and quantization of data.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the
extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action
is set to expire THREE MONTHS from the mailing date of this

action.   In the event a first reply is filed within TWO MONTHS
of the mailing date of this final action and the advisory action
is not mailed until after the end of the THREE-MONTH shortened
statutory period, then the shortened statutory period will
expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated
from the mailing date of the advisory action.   In no event,
however, will the statutory period for reply expire later than
SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Michael
Pyzocha whose telephone number is (571) 272-3875.   The examiner
can normally be reached on 7:00am - 4:30pm first Fridays of the
bi-week off.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Andrew Caldwell can be
reached on (571) 272-3868.   The fax phone number for the
organization where this application or proceeding is assigned is
703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER